AMENDMENTS TO THE CLAIMS

1 - 2. (Cancelled)

3. (Currently Amended) A method ~~according to one of claim 1 or claim 2~~, comprising:

sampling at differing sample times a section of a signal transmitted via a transmission channel;

determining a total number of edges in a sampled section;

analyzing neighboring sample values and forming therefrom a statistical value;

determining a figure of merit from the statistical value and the total number of edges, wherein ~~the~~ determining ~~of~~ the figure of merit includes ~~the~~ determining a ratio between the statistical value and the total number of edges; and

deriving a jitter corresponding to the figure of merit by using one of a jitter-versus-figure of merit curve and a look-up table.

4 - 5. (Cancelled)

6. (Currently Amended) A method ~~according to one of claim 1 or claim 2~~, comprising:

sampling at differing sample times a section of a signal transmitted via a transmission channel;

determining a total number of edges in a sampled section;

analyzing neighboring sample values and forming therefrom a statistical value, wherein the forming of the statistical value is a derivation from ~~the~~ a number of nominal edges within one sample section, a nominal edge being an edge which occurs substantially in the middle of two sample values indicating data bits;

determining a figure of merit from the statistical value and the total number of edges; and

deriving a jitter corresponding to the figure of merit by using one of a jitter-versus-figure of merit curve and a look-up table.

7. (Original) A method according to claim 6, wherein, if the sampling of a transmitted signal is three-fold oversampled, each third sample value indicates a data bit.

8 - 9. (Cancelled)

10. (Currently Amended) A method, ~~according to claim 9~~ comprising:

sampling at differing sample times a section of a signal transmitted via a transmission channel;

determining a total number of edges in a sampled section;

analyzing neighboring sample values and forming therefrom a statistical value, wherein the forming of the statistical value is a derivation of ~~the~~ a sum of a number of early edges and ~~the~~ a number of late edges within one sample section, a late edge being an edge which occurs immediately before a sample value indicating a data bit, and an early edge being an edge which occurs immediately after ~~a~~ the sample value indicating a data bit;

determining a figure of merit from the statistical value and the total number of edges; and

deriving a jitter corresponding to the figure of merit by using one of a jitter-versus-figure of merit curve and a look-up table.

11. (Currently Amended) A method, ~~according to one of claim 1 or claim 2 further~~ comprising:

sampling at differing sample times a section of a signal transmitted via a transmission channel;

determining a total number of edges in a sampled section;

analyzing neighboring sample values and forming therefrom a statistical value;

determining a figure of merit from the statistical value and the total number of edges;

generating ~~the~~ a selected one of ~~said~~ a look-up table and a jitter-versus-figure of merit curve during a calibration phase by:

~~a)~~ determining for each sampled section of a determined number of sections of a transmitted signal a figure of merit[,];

~~b)~~ determining by means of appropriate measuring equipment and for each said sampled section of ~~a~~ the determined number of sections of ~~a~~ the transmitted signal a total jitter number[,]; and

~~c)~~ joining together the figure of merit and the total jitter number to form a pair of values in the selected one of the look-up table and the jitter number-versus-FM curve; and

deriving a jitter corresponding to the figure of merit by using the selected one of the jitter-versus-figure of merit curve and the look-up table.

12. (Original) A method according to claim 11, wherein the total jitter number is deviated from a jitter bathtub curve or an eye diagram.

13. (Original) A method according to claim 11, wherein a deterministic jitter number and a random jitter number are determined by means of said measurement equipment and are used for determining said total jitter number.

14. (Original) A method according to claim 13, wherein the random jitter number is modified by means of a reflexion phase shifter.

15 - 23. (Cancelled).

24. (New) A method according to claim 3, wherein the sampling of the signal is an at least twofold oversampling.

25. (New) A method according to claim 6, wherein the sampling of the signal is an at least twofold oversampling.

26. (New) A method according to claim 7, wherein the sampling of the signal is an at least twofold oversampling.

27. (New) A method according to claim 10, wherein the sampling of the signal is an at least twofold oversampling.

28. (New) A method according to claim 11, wherein the sampling of the signal is an at least twofold oversampling.

29. (New) A method according to claim 12, wherein the sampling of the signal is an at least twofold oversampling.

30. (New) A method according to claim 13, wherein the sampling of the signal is an at least twofold oversampling.

31. (New) A method according to claim 14, wherein the sampling of the signal is an at least twofold oversampling.